## Guest editorial

## Suicide guns: why collect this information?

Firearm suicide is a worldwide problem. The majority of firearm deaths in many countries are suicides (including Australia, Canada, Denmark, France, New Zealand, Norway, Scotland, and the United States).12 In the United States, over half of suicides are committed with firearms.<sup>1</sup> However, we know much more about the characteristics of suicide victims than we do about the firearms that they

Although often overlooked, the collection of information on the characteristics of firearms involved in suicide can be very useful for research and for the development and evaluation of prevention programs and policies.<sup>3 4</sup> We believe it is important to improve collection of suicide firearm information, as part of the collection of firearm information for all firearm injuries, for the following reasons. First, information on the manufacturers and models of guns used most frequently in suicide can be used to evaluate intervention programs. For example, we used such information to evaluate the extent to which the types of guns used to commit suicide are recovered in gun buyback programs in Wisconsin. Our analysis showed that firearms recovered in buyback programs are *not* the ones most likely to be used in suicides.4 This information provides important feedback for the buyback programs to focus on the guns most often associated with suicide.

Secondly, information on physical firearm characteristics (including serial number) is needed in order for the Bureau of Alcohol, Tobacco, and Firearms (ATF) to trace when, where, and by whom the firearm was originally purchased. Firearms used in homicide are increasingly being traced; however those used in suicide are not routinely traced. A great deal of useful information can be obtained from tracing suicide firearms and linking the trace results with the fatal event. This includes:

- Whether the first purchaser was the suicide victim or another person at the same address.
- The proximity of the location of first purchase to the location of the suicide.
- The time interval between the first purchase of the firearm and the fatal event.

In regard to this time interval, several studies have indicated that the period immediately after the firearm purchase is particularly high risk for suicide. A study using information from handgun purchase applications found that the rate of firearm suicide in the first week after the purchase of a handgun was 57 times as high as the rate in the general population.<sup>3</sup> A study based on ATF trace data for suicide firearms in Wisconsin also demonstrated a sharp increase in risk of suicide within one week of firearm purchase.<sup>5</sup> Information on whether the victim was the first purchaser and the time interval between purchase of the firearm and the suicide may be important in stimulating the development of more effective efforts to restrict the purchase of guns by persons with a history of mental illness. A history of mental illness is a known risk factor for suicide.67 Although there are provisions in the law to prevent those with such a history from purchasing a firearm, the effectiveness of current methods of screening for such a history at the time of purchase is likely to be limited.<sup>7</sup>

Third, information on firearm design features that restrict unauthorized access such as trigger locks or

personalized guns is needed because they represent a potentially effective approach to reducing firearm suicide events. Several states have passed or are considering laws to incorporate safety features into guns that would reduce unauthorized access to them. For example, in Maryland, by 2003, all guns sold in the state will be required to incorporate built-in trigger locks into the design of the gun.<sup>10</sup> Smith & Wesson recently agreed to have internal locking devices in place within two years.11 Such built-in locks currently exist in both keyed and combination styles, and when properly engaged, prevent discharge by unauthorized persons. 12 As these safety features increasingly become incorporated into firearms, it will be important to have accurate information on the manufacturer and model of suicide guns in order to evaluate the effectiveness of these features for preventing suicide.

A fourth reason for collecting this information is to evaluate the effects of changes in laws, such as those regulating firearm access by youths. Our center has previously analyzed selected firearm policy interventions, some of which appear to have had a limited impact.<sup>13</sup> For effective policy changes to occur, comprehensive information must be available to generate, test, and evaluate them.

A model system, the Wisconsin Firearm Injury Reporting System, has demonstrated the efficacy of obtaining suicide firearm information on the state level.14 Recommended data elements for surveillance of all firearm related injuries have previously been published.15 Efforts are underway to construct a national system to collect data for all firearm fatalities.<sup>16</sup> We strongly support this effort. Given the availability of the firearm at the scene of the suicide, and the potentially great utility of information on firearm characteristics, it would be timely and useful to incorporate such information as part of a national firearm injury surveillance system.

Firearm suicides have taken a great human toll in many countries. In the United States alone, firearm suicides have accounted for over 180 000 deaths for the decade 1988-97.17 However the issue of firearm suicide is often ignored while firearm homicide receives greater attention. Multiple strategies, short term and long term, targeting the victim, the environment and the firearm are needed to reduce these deaths. We can't afford to wait any longer!

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## Thanking reviewers

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